# The Maine Youth Drug and Al cohol Use Survey (MYDAUS)

# Executive Summary for The Results of the Spring 2000 Survey



Photo by Jari Feldt

# February 2001

# The Maine Youth Drug and Alcohol Use Survey (MYDAUS)

# EXECUTIVE SUMMARY FOR THE RESULTS OF THE SPRING 2000 SURVEY

# Prepared by:

State of Maine
Office of Substance Abuse (OSA)
Department of Mental Health, Mental Retardation,
and Substance Abuse Services

In conjunction with:

**Pan Atlantic Consultants** 

In accordance with federal and state laws, the Maine Office of Substance Abuse, DMHMRSAS, does not discriminate on the basis of disability, race, color, creed, gender, age, or national origin in admission or access to treatment, services, or employment in its programs and activities.

This project was supported, in part, by the National Institute on Drug Abuse, National Institutes of Health, the Department of Education, the Department of Justice (Office of Juvenile Justice and Delinquency Prevention), and the Center for Substance Abuse Prevention, SAMHSA.

This information is available in alternate formats upon request.

January 2001

#### **ACKNOWLEDGEMENTS**

Everyone involved in this project would like to extend their thanks to the principals and superintendents who chose to participate in this survey, and to the teachers and school staff who supported this effort. But, most importantly, we would like to thank the students who took the time and effort to share their experiences with us. This report is our way of thanking all of you. We hope that you find the report informative and useful.

The development and implementation of the 2000 Maine Youth Drug and Alcohol Use Survey (MYDAUS) was a collaborative effort between the Maine Office of Substance Abuse (OSA) in the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), the Social Development Research Group (SDRG) at the University of Washington, and Pan Atlantic Consultants (PAC). In addition to the Maine Office of Substance Abuse which oversaw the entire project, specific duties of the other agencies were as follows:

Pan Atlantic Consultants

Patrick O. Murphy, President 5 Milk Street Portland, ME 04101

- Responsible for all survey administration activities
- Provided schools and school systems with individual reports
- Responsible for weighting the data, data analysis, and report production

# The Social Development Research Group

University of Washington 9725 3<sup>rd</sup> Avenue NE, Suite 401 Seattle, WA 98115-2024

- Developed the survey instrument and syntax relating to survey validity testing
- Provided the risk and protective factor framework

Jamie Clough (OSA) served as the Project Leader and Kristina Morse (PAC) served as the Project Manager. Others whose efforts on this project should be noted include: Melanie Lanctot (OSA), Linda Williams (OSA), Rebecca Matusovich (OSA) and Melanie McCoy (PAC).

For further information about this project, contact:

Office of Substance Abuse Information and Resource Center 159 SHS, AMHI Complex Marquardt Building, 3<sup>rd</sup> Floor Augusta, ME 04333-0159 1-800-499-0027 TTY (207) 287-4475

Or visit the Office of Substance Abuse's website at: www.state.me.us/dmhmrsa/osa

January 2001

# **Executive Summary**

# **Overview and Implications**

Effective prevention requires that consistent messages encouraging healthy choices be delivered by multiple messengers—schools, parents, peers, and the community—repeatedly throughout childhood and adolescence. The greater the engagement of all of these groups, the higher the chances of success. While the trends in the MYDAUS 2000 survey are encouraging, it must be remembered that all the percentages represent real people. Research indicates that for every year adolescents delay use of alcohol, they decrease the odds of lifelong dependence by 15% and lifelong abuse by 8%. The results are similar for drugs—reductions of 5% for lifelong dependence and 4% for lifelong abuse—for every year they delay initial use. Research also shows that youth who delay substance use until age 21 almost never develop substance abuse problems. Prevention efforts must target each new generation or else the hard won gains will quickly disappear.

For the 2000 MYDAUS, the Office of Substance Abuse decided to solicit *all* public schools in Maine with any grades 6 through 12 to participate in the survey in order to increase useable data and to provide local, objective data to schools applying for funds under the Safe and Drug Free School Act. Data were collected from 180 of the 449 public schools with grades 6 through 12 in Maine; this resulted in a school response rate of 40%. Altogether, 30,491 students returned usable questionnaires. The percentage of participating students varied across counties, ranging from a high of 84% in Hancock County to a low of 54% in Somerset County. The overall response rate for the 2000 MYDAUS, taking into consideration both the school and student response rates, was 31% (school response rate X student response rate; 40% X 77% = 31%).

MYDAUS was administered in 1995, 1996, 1998/1999, and 2000. These earlier data provide important comparisons to the 2000 values for the purpose of monitoring any changes in drug use behaviors over time among Maine school students. Although such comparisons can be useful, it is very important to note that there have been significant changes in methodology throughout the history of the survey that may have impacted the results; therefore, any comparisons between the data should be made with caution (see Appendix A in the full report for a discussion of differences in survey methodology).

Despite these caveats, the data suggest several noteworthy reductions over the past 5 years in several categories of use among 6th through 12th graders:

- 19% reduction in the prevalence of past-month alcohol consumption (from 38.0% in 1995 to 30.6% in 2000)
- 21% reduction in the prevalence of past-month marijuana use (from 19.4% in 1995 to 15.4% in 2000)

-

<sup>&</sup>lt;sup>1</sup> "Preventing Adolescent Substance Abuse", Research Update. May, 2000

<sup>&</sup>lt;sup>2</sup> Ibid.

- 20% reduction in the prevalence of lifetime cigarette smoking (from 52.8% in 1995 to 42.4% in 2000)
- 31% reduction in the prevalence of past-month cigarette smoking (from 25.1% in 1995 to 17.3% in 2000)
- 22% reduction in the prevalence of hallucinogen (LSD and other psychedelics) use (from 9.7% in 1995 to 7.6% in 2000)

In addition, the following good news can be reported:

- A 46% reduction in inhalant use, from 8.7% in 1995 to 4.7% in 2000.
- A 16% reduction in binge drinking within the past two weeks, from 18.5% in 1995 to 15.5% in 2000.
- A 20% reduction in the proportion of students who felt it would be "very easy" to obtain alcohol, from 37.9% in 1995 to 30.2% in 2000.
- A 28% reduction in the proportion of students who felt it would be "very easy" to obtain cigarettes, from 59.2% in 1995 to 42.9% in 2000.

Based on the survey results, alcohol, tobacco, and marijuana continue to be the most commonly used substances by students in grades 6 through 12. In the month before the survey, approximately 30% of students had used alcohol, 17% had smoked cigarettes, and 15% had used marijuana. Other areas of particular concern include:

- Approximately 30% of 12<sup>th</sup> graders reported binge drinking within the previous two weeks.
- The two most prevalent community risk factors were "perceived availability of drugs" and "laws and norms favorable toward drug use."
- Among 10<sup>th</sup> through 12<sup>th</sup> graders, 12% reported having sold illegal drugs in the twelve months prior to the survey.

Regarding prohibited behavior gathered in the MYDAUS 2000 survey:

- The proportion of males in the survey reporting prohibited behavior was generally twice as large as the proportion of females.
- Students were most likely to report having been drunk or high at school (14%).
- Twelve percent (12%) indicated having attacked someone.
- Eleven percent (11%) indicated having been suspended.

In order to provide a broader perspective on the rates of substance abuse among Maine students, the MYDAUS results were compared to those from the national survey, Monitoring the Future (MTF). MTF is an ongoing study of the behaviors, attitudes and values of American secondary school students, college students and young adults. Each year, a random sample totaling approximately 50,000 students in the eighth, tenth, and twelfth grades are surveyed, which provides a reliable sample for comparison<sup>3</sup>. (See

 $<sup>^3</sup>$   $12^{th}$  graders have been surveyed since 1975, and  $8^{th}$  and  $10^{th}$  graders have been surveyed since 1991.

Figure 1. on page 4) However, because the MYDAUS and MTF surveys employ different methodologies, it is important to use caution when comparing the results.

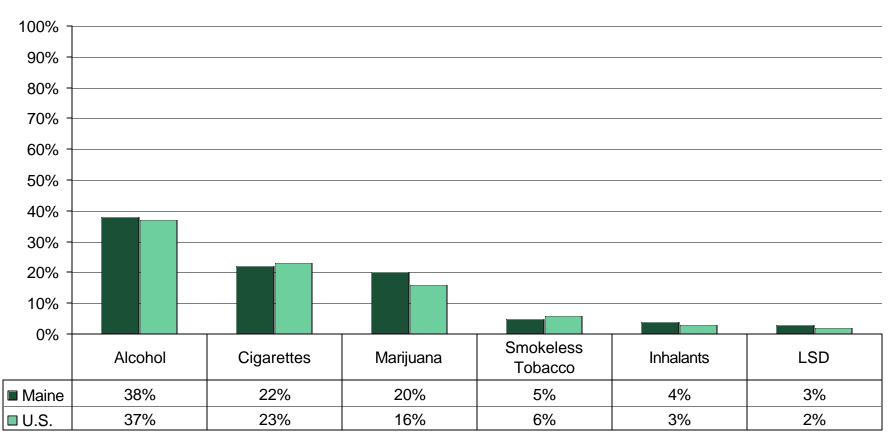
- Comparing the MYDAUS and the national results shows higher past month use of alcohol among Maine's 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, with the greatest difference being between MYDAUS and the MTF 8<sup>th</sup> graders (25% vs. 22% respectively).
- A greater proportion of MYDAUS 10<sup>th</sup> and 12<sup>th</sup> graders used marijuana than did the 10<sup>th</sup> and 12<sup>th</sup> graders in the U. S. sample. The greatest difference was in 30-day use among 12<sup>th</sup> graders; 29% of MYDAUS 12<sup>th</sup> graders were current users versus 22% of the MTF 12<sup>th</sup> graders.
- Seventh and eighth grades were the MYDAUS student's peak grades for inhalant use. The prevalence of past month inhalant use was slightly higher for the MYDAUS 8<sup>th</sup> and 10<sup>th</sup> graders than for the 8<sup>th</sup> and 10<sup>th</sup> graders in the national survey.
- The use of LSD and other hallucinogens tended to be more prevalent among the MYDAUS students than among the U.S. students. This was especially true for lifetime use among 12<sup>th</sup> graders (17% of MYDAUS 12<sup>th</sup> graders versus 13% of MTF 12<sup>th</sup> graders.)

In 1995, OSA began using outcome-based funding which requires that prevention providers focus on positive changes in participants' behavior that can be documented. As the science of prevention has advanced, OSA has worked to move the field toward the use of research-based strategies and sound evaluation techniques through the Request For Proposals process and in Safe and Drug-Free Schools and Communities Act applications.

Environmental strategies have been used with increasing frequency in the past 10 years, and are a powerful tool in our society's effort to reduce the toll of alcohol, tobacco, and other drug problems. Another set of promising strategies focuses on increasing the bonding and involvement of youths with their families, schools, communities, or a significant role model or mentor. Current research in the prevention field has identified opportunities for bonding and involvement as one of the most salient protective factors in terms of preventing substance abuse and other problematic behaviors.

Schools have a critical role to play in the prevention of substance abuse. Comprehensive (K-12) programming using researched and evaluated programs bear the most chance of success. Using the survey data to examine changes in use patterns and risk/protective factors across different grade levels can help schools to time their strategies most effectively. For instance, schools need to focus on the middle school years to prevent or delay the initiation of substances. The data also indicate that strategies focusing on inhalants need to be targeted to this age group. Conversely, the tenth graders emerge as the grade level with the highest overall level of risk factors and the lowest level of protective factors. Therefore, the early high school years should be examined carefully for opportunities to improve this pattern.

Figure 1: Prevalence of 30-Day Use of Alcohol, Tobacco, and Specific Illegal Drugs Among Maine Students (Grades 8, 10, 12) versus U.S. Students, 2000



Source of Maine data: MYDAUS, 2000; Source of U.S. data: Monitoring the Future, 2000

Without broad based strategies involving all segments of society, the efforts of schools alone will have limited effectiveness. Systemic change on multiple levels is the most effective way to have an impact on the current and future issues involving substance abuse and related problems. Adoption of environmental strategies and programs that provide and foster opportunities for bonding and meaningful involvement hold much promise. This programmatic expansion would complement the existing prevention efforts in the State of Maine.

# Additional important findings from the 2000 MYDAUS

(See the following page for Figure 2. Percent of 6<sup>th</sup> through 12<sup>th</sup> Grade Students Reporting Current Use of Specific Substances, 2000 MYDAUS):

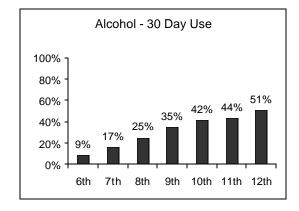
Alcohol, marijuana and cigarettes:

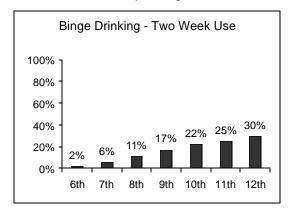
- Alcohol was the substance most likely to have been used by the students surveyed; however, 43% of those surveyed have <u>never</u> had more than a few sips of alcohol in their lifetime. Approximately three in ten Maine students surveyed (31%) reported having consumed alcohol in the 30 days preceding the survey; 15.5% of those surveyed indicated that they participated in binge drinking in the two weeks before the survey.
- Twenty-nine percent (29%) of students in grades 6 through 12 indicated that they have used marijuana, and 15% reported that they used marijuana in the 30 days prior to the survey.
- More than one-half of students surveyed (58%) indicated that they have never smoked cigarettes. Fewer than two in ten students (17%) reported that they smoked cigarettes in the 30 days preceding the survey.

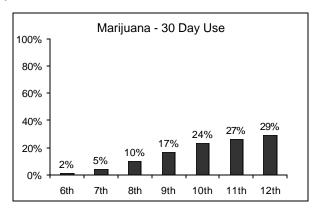
Other substances used by students (the survey instrument <u>did not</u> include questions about opiates or "club drugs"):

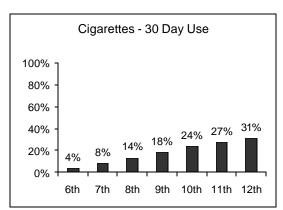
- Less than 14% of those surveyed have used smokeless tobacco in their lifetime, and 4% had used smokeless tobacco in the 30 days prior to the survey.
- Thirteen percent (13%) of students in grades 6 through 12 reported that they have ever used inhalants, and 5% indicated that they used inhalants in the 30 days preceding the survey.
- Surveyed students reported less use of psychedelics, stimulants, and cocaine than the other substances previously mentioned.
- Less than eight percent (8%) of those surveyed reported having used psychedelics in their lifetime, and 3% had used psychedelics in the 30 days prior to the survey.

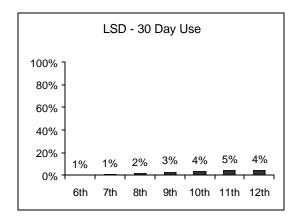
Figure 2. Percent of 6th through 12th Grade Students Reporting Current Use of Specific Substances, 2000 MYDAUS.

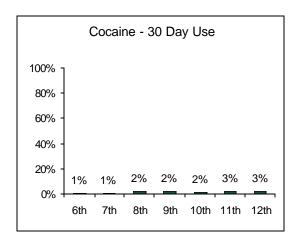


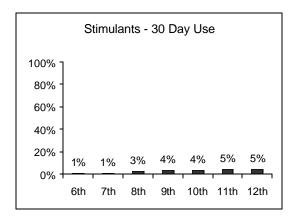


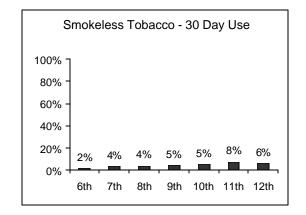


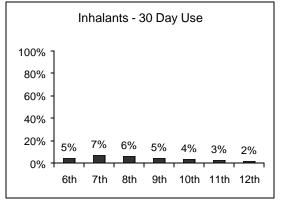












- Similarly, less than eight percent (8%) of students in grades 6 through 12 indicated that they have used stimulants in their lifetime, and 3% had used stimulants in the 30 days prior to the survey.
- Less than 5% of those participating in the 2000 MYDAUS reported having used cocaine in their lifetime. Two percent (2%) indicated that they used cocaine in the 30 days preceding the survey.
- With the exception of lifetime and 30 day use of inhalants and 30-day use of cocaine, the reported rates of substance use increased steadily among students between grades 6 and 12.

A somewhat greater proportion of male students than female students reported using the substances included in the survey (with the notable exception of cigarettes) and males reported heavier use than females.

- A somewhat higher percentage of male students (31%) reported having used marijuana in their lifetime than did female students (26%). Similarly, a somewhat higher percentage of male students (17%) reported use of marijuana in the past 30 days than did female students (13%).
- Male students (18%) are somewhat more likely than female students (13%) to report having participated in binge drinking (5 or more drinks at one time) in the two weeks prior to the survey.
- Reported lifetime use of smokeless tobacco was much higher for male students (20%) than female students (7%), and male students were more likely than female students to indicate that they had used smokeless tobacco in the 30 days preceding the survey (7% of males versus 2% of females).
- Female students, however, were more likely to have tried cigarettes and a higher proportion were smoking regularly at the time of the survey (10% of females and 8.5% of males reported being regular smokers).

### **Prevalence of Violent and Prohibited Behaviors**

- The proportion of males reporting prohibited behaviors during the 12 months prior to the survey was generally twice as large as the proportion of females. An even higher proportion of males than females reported carrying a handgun in the last year (7.2% versus 1.1%), while a smaller relative difference was observed between the proportions of males and females that reported being drunk or high at school (16.0% versus 11.5%).
- One percent (1%) of the students surveyed reported having carried a handgun to school in the 12 months prior to the survey.

- Approximately one in five 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade students (22%, 21% and 22% respectively) reported being drunk or high at school in the previous 12 months.
- 12% of the 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> graders reported having sold illegal drugs in the year prior to the survey.

# **Risk and Protective Factors**

(see Appendix B for definitions and Appendix D for survey instrument)

### Risk Factors

- Nearly half of students in grades 6, 8, 10, and 12 reported *low commitment to school*, ranging from a low of 46.9% (grade 12) to a high of 49.9% (grade 10).
- Students in the higher grades are more likely than those in the lower grades to report an *early initiation of drug use*; percentages ranged from a high of 41.6% in grade 12 to a low of 31.3% in grade 6.
- Students in the higher grades are more likely than those in the lower grades to report *low perceived risks of drug use*; percentages ranged from a high of 50.1% in grade 12 to a low of 31.2% in grade 6.
- Students in the 12<sup>th</sup> grade (51.0%) and 10<sup>th</sup> grade (51.3%) are more likely to report higher levels of *friends' use of drugs* than those in the 8<sup>th</sup> grade (44.3%) or 6<sup>th</sup> grade (27.5%).
- Students in the higher grades are more likely than those in the lower grades to report higher levels of *perceived availability of drugs*; percentages ranged from a high of 62.1% in grade 12 to a low of 29.2% in grade 6.
- Students in the 8<sup>th</sup> grade (49.1%) are the most likely to report the highest levels of *family conflict*.
- Students in the higher grades are more likely than those in the lower grades to report *parental attitudes favorable toward drug use* (this pertains only to alcohol, tobacco and/or marijuana); percentages ranged from a high of 48.7% in grade 12 to a low of 13.0% in grade 6.

### Protective Factors

- Students in the 10<sup>th</sup> grade (47.9%) reported the lowest levels of protection in terms of *family attachment*.
- Students in the 6<sup>th</sup> grade (61.6%) and 8<sup>th</sup> grade (61.2%) reported most *opportunities for positive involvement* in the family.

- Nearly two-thirds of Maine students in grades 6, 8, 10, and 12 reported that they experience *opportunities for positive involvement* in school. The percentages reported ranged from a low of 60.7% (grade 10) to a high of 65.9% (grade 8).
- More than one-half of students reported a *belief in the moral order*, ranging from a high of 63.1% (10<sup>th</sup> grade) to a low of 53.6% (12<sup>th</sup> grade).
- Students in the lower grades are more likely than those in the higher grades to report higher levels of *opportunities for positive involvement* in the community; percentages ranged from a high of 57.4% in grade 6 to a low of 42.0% in grade 12.
- While students in the 6<sup>th</sup> grade (57.8%) indicated the highest levels of *rewards for positive involvement* in the community, 8<sup>th</sup> grade students (41.0%) reported the lowest levels of protection in this area.

For more information or for a copy of the full report, please contact the:

Maine Office of Substance Abuse Information and Resource Center 159 SHS, AMHI Complex Marquardt Building, 3<sup>rd</sup> Floor Augusta, ME 04333-0159 1-800-499-0027 TTY (207) 287-4475

Or visit the Office of Substance Abuse's website at: www.state.me.us/dmhmrsa/osa

#### REFERENCES

- Brewer, D.D., Hawkins, J.D., Catalano, R.F., & Neckerman, H.J. (1995). Preventing serious, violent, and chronic juvenile offending: A review of selected strategies in childhood, adolescence, and the community. In J.C. Howell, B. Krisberg, J.D. Hawkins, & J.J. Wilson (Eds.), *A sourcebook: Serious, violent, and chronic juvenile offenders* (pp. 61-141). Thousand Oaks, CA: Sage Publications, Inc.
- Hawkins, J.D., Arthur, M.W., & Catalano, R.F. (1997). Six state consortium for prevention needs assessment studies: Alcohol and other drugs (final report for the Center for Substance Abuse Prevention). Seattle, WA: University of Washington, Social Development Research Group.
- Hawkins, J.D., Arthur, M.W., & Catalano, R.F. (1995). Preventing substance abuse. In
  M. Tonry & D. Farrington (Eds.), *Building a safer society: Strategic approaches to crime prevention, Crime and Justice* (Vol 19, pp. 343-427). Chicago: University of Chicago Press.
- Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood:
   Implications for substance abuse prevention. <a href="Psychological Bulletin">Psychological Bulletin</a>, 112, 64-105.
- Hawkins, J.D., Catalano, R.F., & Associates. (1992). *Communities that Care: Action for Drug Abuse Prevention*. San Francisco: Jossey-Bass Publishers.
- Kandel, D.B., Simcha-Fagan, O., & Davies, M. (1986). Risk factors for deliquency and illicit drug use from adolescence to young adulthood. <u>Journal of Drug Issues</u>, 16, 67-90.
- Lipsey, M.W., & Derzon, J.H. (1998). Predictors of violent or serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions*. Report by the OJJDP Study Group, prepared for the Office of Juvenile Justice and Delinquency Prevention. Thousand Oaks, CA: Sage Publications, Inc.
- Newcomb, M.D., & Felix-Oritz, M. (1992). Multiple protective and risk factors for drug use and abuse: Cross-sectional and prospective findings. <u>Journal of Personality</u> and Social Psychology, 63, 280-296.